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PPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/720,403	11/24/2003	Ho-Keng Lu	250907-1210	4106
24504	7590 09/29/2005		EXAMINER	
THOMAS, KAYDEN, HORSTEMEYER & RISLEY, LLP			SUN, SCOTT C	
100 GALLER	IIA PARKWAY, NW			
STE 1750			ART UNIT	PAPER NUMBER
ATLANTA,	GA 30339-5948		2182	
			DATE MAIL ED: 00/20/2004	•

Please find below and/or attached an Office communication concerning this application or proceeding.

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of into many be arealized under the protosion of 3 CPT is 1,33(a). In no event, however, may a reply be timely filed If the period for reply specified above is less than timity (30) days, a reply within the statutory minimum of timity (30) days, a reply with the statutory minimum of timity (30) days, a reply within the statutory minimum of timity (30) days will be considered timely. If the period for reply specified above is less than timity (30) days, a reply within the statutory minimum of timity (30) days, a reply within the statutory minimum of timity (30) days (30) MONTHS from the malling date of this communication. Any reply received by this doctor, the manimum statutory period will gay and will apply any of with 100 MONTHS (30) MONTHS from the malling date of this communication. Any reply received by the date of the statutory and the statutory minimum of the statutory minim	6							
## Examiner Scott Sun 2182 - The MAILING DATE of this communication appears on the cover sheet with the correspondence addrass = Period for Reply A SHORTENIDE STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extension of time may be available under the provisions of 37 CFR 1.735(a). In no event, however, may a reply be time for the provision of 37 CFR 1.735(a). In no event, however, may a reply be time for the provision of 37 CFR 1.735(a). In no event, however, may a reply be time for exply specified above, the minorum statutory praisument of thirty (00) days vill be considered limitely. - If No period for reply is appetited above, the minorum statutory praisument of the provision of the period of the communication. - If No period for reply is appetited above, the minorum statutory praisument of the period of the communication. - If No period for reply is appetited above, the minorum statutory praisument of the period of the communication. - If No period for reply is appetited above, the minorum statutory praisument of the period of the communication. - A proper year deviced by the Official time there members after the mailing date of this communication, even if threly filed, may reduce any seamled pattern term adjustment. See 37 CFR 1.746(b). - Status - The Responsive to communication(s) filed on 24 November 2003. - 2a This action is FINAL. - 2b This action is FINAL. - 2b This action is non-final. - 3) Since this application is in condition for allowance except for formal malters, prosecution as to the merits is closed in accordance with the practice under Exparte Quayle, 1935 C.D. 11, 453 O.G. 213. - Disposition of Claims - 4) Claim(s) 1.15 is/are pending in the application. - 4a) Of the above claim(s) 1.5 is/are withdrawn from consideration. - 5 Claim(s) 1.15 is/are rejected. - 7) Claim(s) 1.15 is/are rejected to. - 8) The second of the provision of the Examiner. - 10) The drawing(s) filed on 1.5 is/are: a) accepted or b) 0.1		Application No.	Applicant(s)					
Scott Sun		10/720,403	LU ET AL.					
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Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extractions of terre may be available under the provisions of 37 CFR 1.138(a), in no event, however, may a reply be simaly filled - If the period for may specified above, the maximum statutory period will apply and will easier SIX (a) MONTH'S from the mailing date of this communication. - If NO period for reply a specified above, the maximum statutory period will apply and will easier SIX (a) MONTH'S from the mailing date of this communication. - If NO period for reply a specified above, the maximum statutory period will apply and will easier SIX (a) MONTH'S from the mailing date of this communication. - If NO period for reply a specified above, the maximum statutory period will apply and will easier SIX (a) MONTH'S from the mailing date of this communication. - Any reply received by this Official eith thin the month and the mailing date of this communication, even it illney statut. - If NO period for reply specified alter than three months after the mailing date or this communication, even it timely statut. - If NO period for reply specified alter than three months after the mailing date or this communication, even it timely statut. - If NO period for reply specified alter than three months after the mailing date or this communication. - If NO period for reply specified alter than three months after the mailing date or this communication. - If NO period for reply specified alter than three months and the statutory specified and the communication. - If NO period for reply specified alter than three mailing date or this communication. - If NO period for specified alter than three months are the proving specified and proving specified alter than the mailing date or this communication. - If NO period for the period than the proving specified and the communication. - If NO period for the period for specified alter than three mailing date or this communication. - If NO								
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DETAILED ACTION

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kagan (PG Pub# US 2001/0049755 A1) and further in view of Chow (US Patent #6,052,387).

As per claim 1, Kagan discloses a method for performing DMA transfers with dynamic descriptor structure, comprising the steps of:

Creating a new chain of descriptors each including an end-of-chain entry set to a false value except a dummy descriptor at the end of the new chain having the end-of-chain entry set to a true value, wherein each of the descriptors excluding the dummy descriptor further comprises one or more parameters identifying data to be transferred and a link pointer specifying a next descriptor within the new chain (Paragraph 50-57)

Appending the new descriptor chain to a previous descriptor chain, if any, by transferring the parameters and the link pointer of the first descriptor within the new descriptor chain to a dummy descriptor of the previous descriptor chain (paragraph 58)

Changing the end-of-chain entry of the dummy descriptor within the previous descriptor chain from the true value to the false value (Paragraph 63)

Fetching the descriptor specified by a next address (62)

Determing whether the end-of-chain entry of the current fetched descriptor is set to the false value (62-63)

If so, updating the next address with the link pointer of the current fetched descriptor (62)

Transferring the data identified in the parameter of the currently fetched descriptor (50-55)

Kagan does not disclose expressly the descriptors each including an end-ofchain entry.

Chow discloses descriptors each including an end-of-chain entry (Figure 4B; column 4, lines 26-40)

As per claim 2, Kagan discloses the method as recited in claim 1, further comprising the step of issuing a command after the new descriptor chain is appended to the previous descriptor chain (paragraph 64-65)

As per claim 3, Kagan discloses the method as recited in claim 2 further comprising the step of causing the next address to point to the first descriptor within the new descriptor chain before the issuing step (paragraph 63-64)

As per claim 4, Kagan does not disclose expressly the method as recited in claim 2 further comprising the step of ignoring the issued command if the data transfer identified in the previous descriptor chain is being performed

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Chow discloses a step of ignoring the issued command if the data transfer identified in the previous descriptor chain is being performed (Column 5, lines 15-30)

As per claim 5, Kagan discloses the method as recited in claim 2 further comprising the step of accepting the issued command if there are no more data transfers identified in the previous descriptor chain (paragraph 64)

As per claim 6, Kagan does not discloses expressly the method as recited in claim 1 wherein the fetching step through the transferring step are executed in a loop until the end-of-chain entry with the true value is detected in the determining step

Chow discloses the fetching step through the transferring step are executed in a loop until the end-of-chain entry with the true value is detected in the determining step (Column 5, lines 7-14)

As per claim 7, Kagan does not disclose expressly the method as recited in claim 5, wherein, after acceptance of the issued command, the fetching step through the transferring step are executed in a loop until the end-of-chain entry with the true value is detected in the determining step

Chow discloses the fetching step through the transferring step are executed in a loop until the end-of-chain entry with the true value is detected in the determining step (Column 5, lines 7-14)

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Kagan's invention and Chow's invention are from the same field of managing and linking lists of descriptors related to DMA data transfers. Furthermore, at the time of invention, it would have been obvious to a person of ordinary skill in the art to combine Kagan's invention with Chow's invention by adding an additional entry (bit) to Kagan's descriptors. The motivation for doing so would have been to allow more efficiency when performing list modifications (Chow, column 5, lines 5-14)

As per claims 8-15, the examiner finds these claims containing the same limitations as claims 1-7. The same arguments used in rejection of claims 1-7 are applied in the same manner in rejection of claims 8-15.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Sun whose telephone number is (571) 272-2675. The examiner can normally be reached on M-F, 10am-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici can be reached on (571) 272-4083. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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ANIMARA PEYTONIA ANIMARY EXAMINER